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PATENT
Attorney Docket No. 041514-5081

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Yoshimi TOMITA

Application No.: 09/584,783

Filed: June 1, 2000

For: OPTICAL DISC RECORDING METHOD)
AND APPARATUS, OPTICAL DISC,)
AND OPTICAL DISC REPRODUCING)
APPARATUS)

Confirmation No.: 4863

Group Art Unit: 2653

Examiner: K. Le

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Sir:

RESPONSE

In response to the Office Action dated October 10, 2003 (Paper No. 9), the period for response to which extends through March 10, 2004 by the concurrent filing of a request for two-month extension of time and corresponding fee payment, favorable reconsideration and allowance of the subject application are respectfully requested in view of the following remarks.

Summary of the Office Action

Claims 1-11 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Kobayashi* (U.S. Patent No. 6,097,695).

Summary of the Response to the Office Action

A Submission of Replacement Drawing Sheets is submitted herewith to improve the appearance of the originally-filed drawings. No changes to the claims are proposed by this response. Claims 1-13 remain pending, with claims 1-11 currently under consideration.

Claim Rejections Under 35 U.S.C. §102(e)

Claims 1-11 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Kobayashi*. This rejection is respectfully traversed for at least the following reasons.

Applicant respectfully submits that *Kobayashi* does not anticipate the recited claims because *Kobayashi* does not disclose all of their features. For instance, Applicant respectfully submits that *Kobayashi* fails to teach or suggest the claimed combinations including at least “phase modulation signal with abrupt changes in the waveform thereof at phase transition points being removed,” as set forth in independent claims 1, 4, 9 and 10, and the claimed combinations including at least wherein “phase modulation signal of said serial data...of which abrupt changes in the waveform thereof at phase transition points are removed,” as set forth in independent claims 7 and 11.

The disclosure of the instant application includes a feature in which abrupt changes in the waveform of the phase modulation signal at phase transition points are removed in accordance with the serial data.

Kobayashi, on the other hand, discloses at column 5, lines 15-25 that a biphasic modulation circuit (7C) sequentially selects a first reference clock and a second reference clock having a frequency $\frac{1}{2}$ of the first reference clock, depending on the logical level of the wobble data ADIP. In particular, *Kobayashi* discloses at column 5, lines 15-42 that the

biphase modulation circuit 7C sequentially selects, depending on the logical level of the wobble data ADIP, a first reference clock...and a second reference clock.... Thereby, the wobble data ADIP is biphasic-modulated to produce a channel signal

(ch).... **The channel signal (ch) inverts the signal level at the timing corresponding to the bit boundary of the wobble data ADIP** and is kept at the constant logic level [during the bit] because the second reference clock is assigned when the logic level of the wobble data ADIP is 0. Moreover, when the logic level of the wobble data ADIP is [1], the first reference clock is assigned and the signal level is inverted in the timing corresponding to the bit center (emphasis added)¹.

In other words, a channel signal (ch) is produced by assigning a predetermined synchronization pattern to the wobble data frame as shown in FIGs. 3C and 3E of *Kobayashi*. Further, the channel signal (ch) of *Kobayashi* inverts the signal level at the timing corresponding to the bit boundary of the wobble data ADIP and is kept at the constant logic level, when the logic level of the wobble data ADIP is “0” and when the second reference clock is assigned. In addition, the signal level is inverted in the timing corresponding to the bit center, when the logic level of the wobble data ADIP is “1” and when the first reference clock is assigned. However, *Kobayashi*'s arrangement does not generate a phase modulation signal with a waveform of which abrupt changes at phase transition points are removed. Thus, Applicant respectfully submits that *Kobayashi* fails to teach or suggest the phase modulation signal with a waveform of which abrupt changes at phase transition points are removed, as set forth in Applicant's claimed combinations.

M.P.E.P. § 2131 states “[t]o anticipate a claim, the reference must teach every element of the claim.” Applicant respectfully submits that since *Kobayashi* does not teach or suggest all of

¹ In the above quotation, “when the logic level of the wobble data ADIP is 0, the first reference clock is assigned,” at column 5, line 38-40 of *Kobayashi* is replaced with “when the logic level of the wobble data ADIP is [1], the first reference clock is assigned.” This change in the quotation is made because Applicant believes that there was a typographical error at column 5, lines 38-40 of *Kobayashi* for at least the following reasons: (1) *Kobayashi* already discusses assigning the second reference clock when the logic level of the wobble data ADIP is 0 at column 5, lines 36-38 of *Kobayashi*; and (2) as shown in FIGs. 3C and 3E, the channel signal (ch) of *Kobayashi* only inverts at a bit center when the wobble data ADIP is 1.

the features of independent claims, 1, 4, 7 and 9-11, *Kobayashi* does not anticipate claims 1, 4, 7 and 9-11. Further, since claims 2, 3, 5, 6 and 8 depend from claims 1, 4 and 7, it is respectfully submitted that *Kobayashi* also does not anticipate claims 2, 3, 5, 6 and 8. Accordingly, withdrawal of the rejection of claims 1-11 under 35 U.S.C. §102(e) is respectfully requested.

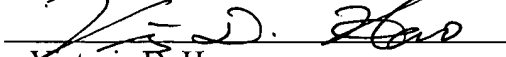
Conclusion

In view of the foregoing, withdrawal of the rejections and allowance of the pending claims are earnestly solicited. Should there remain any questions or comments regarding this response or the application in general, the Examiner is urged to contact the undersigned at the number listed below.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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